

**For:** State and County Offices

**Acceleration of the Geographic Information System (GIS)**

**Approved by:** Deputy Administrator, Farm Programs



**1 Overview**

**A**

**Background**

FSA continues to deploy an operational nationwide GIS. GIS is particularly important to FSA because the majority of FSA's business data is geospatial in nature or referenced to a geographical location such as land records, field locations, and soil types. Using GIS will allow FSA to replace the current system of hard copy aerial photographs, and lessen a series of time consuming manual tasks. GIS also allows FSA to strengthen program delivery by providing more complete, accurate, and timely services to its customers. GIS serves to eliminate paper processes and increase the quality of products, such as accurate digitized maps instead of manually marked up photos.

FSA plans to accelerate the deployment of GIS and complete nationwide data implementation by the end of 2004.

**B**

**Purpose**

This notice provides:

- an outline of the acceleration initiative
- information about using contract and in-house resources for fast track implementation.

**Disposal Date**

April 1, 2004

**Distribution**

State Offices; State Offices relay to County Offices

## 2 Common Land Unit (CLU) Development

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### A

#### CLU Digitizing - In-House Initiative

The most critical component of a successful GIS implementation is development and authorized use of the CLU data layer. The CLU layer includes all farm fields, rangeland, pasture, and designated areas with attributed data used in related programs. Since 1999, FSA has incrementally established 27 digitizing centers in 22 States.

The following table shows the status of established digitizing States and plans for 2003 and 2004.

Completed States	Complete by Spring/Summer 2003	States Currently in Work Through 2003 and/or 2004		New Sites in 2003
Kansas Minnesota Nebraska New Hampshire Oregon Rhode Island Vermont	Connecticut Massachusetts Missouri North Dakota Oklahoma	Arizona California Indiana Iowa Kentucky Louisiana New York	Pennsylvania South Carolina South Dakota Tennessee Texas Utah Virginia	Hawaii New Jersey Texas

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2 Common Land Unit (CLU) Development (Continued)

**A**  
**CLU Digitizing -**  
**In-House**  
**Initiative**  
**(Continued)**

Secondary digitizing is when a State has completed in-State digitizing tasks, and has started digitizing CLU for another State. The following table presents a preliminary State-to-State match-up and schedule for secondary digitizing.

The schedule may be subject to change based on work progression and other impacting factors.

Secondary Digitizing in 2003		Secondary Digitizing in 2004	
Digitizing State	Assisted State	Digitizing State	Assisted State
Minnesota	Wisconsin	Arizona	New Mexico
Vermont	Connecticut Massachusetts Maine	New Jersey	West Virginia
Kansas and Nebraska	Colorado Kentucky	North/South Dakota	Wyoming
Missouri	Michigan		
Oregon	Nevada	Kansas Nebraska Minnesota Utah Vermont	States to be determined. Possible States/areas that may be done in-house depending on imagery and source data availability are: <ul style="list-style-type: none"> <li>American Samoa</li> <li>Commonwealth of Northern Mariana Island</li> <li>Guam</li> <li>Puerto Rico</li> <li>US Virgin Island.</li> </ul>
Oklahoma	Texas		
New Jersey	Delaware Maryland		
North Dakota	South Dakota		

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**2 Common Land Unit (CLU) Development (Continued)**

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**B**

**CLU Digitizing -  
Outsourcing  
Effort**

To increase the rate of delivery of CLU to the field, FSA will contract out CLU production. The contracting process has begun and digitizing is expected to start in early May. The following table provides the States targeted for contract acceleration by year. Depending on progress of in-house States in 2003, timely funding availability in FY 2004, and the quality of the target State source data, identified States may have some counties contracted and the remainder completed in-house.

Targeted States for FY 2003	Targeted States for FY 2004
Idaho Illinois Mississippi Montana North Carolina Ohio Washington	Alabama Alaska Arkansas Florida Georgia Wyoming

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## 2 Common Land Unit (CLU) Development (Continued)

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### CLU Digitizing - CLU Digitizing and Contracting States

The following map shows digitizing and contracting States by FY.



### 3 Mosaicked Digital Ortho Quadrangles (MDOQ)

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#### A MDOQ Outsourcing

APFO takes the lead role for FSA to:

- produce MDOQ's
- inspect CLU data layers completed by digitizing centers.

MDOQ is high quality based imagery that has been edited to eliminate lines, color differences, and distortion between areas of the county.

Currently, APFO staff creates the MDOQ products for the digitizing centers and verifies that CLU products done by the digitizing centers meet established standards and that each center is producing similar results. Because of the establishment of additional in-house sites and the needs of the outsource States, APFO will purchase MDOQ products from outside sources to increase the rate of delivery.

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### 4 Preliminary Preparation and Contact Information

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#### A Preparing for Digitizing

State and County Office employees can assist in the acceleration process by updating and maintaining the aerial photos that will become source data for in-house digitizers and private sector vendors.

The following steps are recommended for preparing source data:

- determine if source data meets 2-CP standards
  - identify counties that follow 2-CP procedure and are "ready to go"
  - identify counties that may require map work corrective action, such as:
    - fields, tracts, and farms delineated
    - consistent color ink used for delineation
    - map work up-to-date
  - identify unusual "work", such as:
    - large chunks of data missing
    - inconsistent colors used for delineation throughout the county
    - inconsistent line work which makes the maps hard to interpret
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#### 4 Preliminary Preparation and Contact Information (Continued)

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##### A

##### Preparing for Digitizing (Continued)

- identify Service Centers with atypical mapping practices:
    - counties that have mounted photos and the process used
    - use of large maps vs. small copies for all work and updates
    - counties that use natural or manmade ground features as boundaries around fields and, therefore line work is not drafted on the photo
  - determine and document map information:
    - date of basemaps
    - system used to index maps
    - amount of out-of-county land administered.
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##### B

##### Contact

If questions about this notice contact Shirley Hall, GIS Coordinator, PECD at 202-720-3138 or email to [shirley\\_hall@wdc.usda.gov](mailto:shirley_hall@wdc.usda.gov).

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